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NAS WHITING FIELD
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LETTER REGARDING FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
COMMENTS ON SITE 40 WORK PLAN NAS WHITING FIELD FL
4/29/2008
FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION



Florida Department of Environmental Protection

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Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

April 29, 2008

Mr. Tread Kissam
Department of the Navy
Naval Facilities Engineering Command Southeast
NAS Jacksonville
Yorktown & Ranger
Building 103
Jacksonville, Florida 32213

RE: Work Plan for Base-Wide Groundwater Sampling, Membrane Interface Probe, and Monitoring Well Installation Activities at Site 40, Naval Air Station Whiting Field, Milton, Florida, Draft-Final, Rev. 1 (Tetra Tech NUS, Inc., April 16, 2008)

Dear Mr. Kissam:

I have reviewed the above document dated April 16 2008 (received on April 16, 2008). Tetra Tech submitted this Work Plan (WP) to describe a groundwater sampling plan which is designed to provide additional groundwater chemical data to support current remediation projects and future feasibility studies (FS). This WP also describes a membrane interface probe (MIP) investigation and monitoring well installation program. The objective of the WP is to resolve data gaps related to groundwater in the North Field area discovered after analysis of the last round of groundwater sampling in the summer of 2007 and to verify the current boundary of the North and South Field plumes. I am in agreement with the WP, but also have the following comments pertaining to this document:

1. **Section 1.1, PURPOSE OF THE WORK PLAN, Page 1-1:** I agree with this statement in the WP...*"This WP specifies the general area and depths of the MIP investigation and the likely locations and depths of the proposed monitoring wells; however, each of these investigations will be conducted as an iterative process and these projected locations and depths may be changed as a result of unexpected information."*
2. **Section 2.1, Overview, Page 2-1, Paragraph 1, Sentence 4:** Please substitute the word "well" for the word "wells". It should read...*"Resolution of the data gap requires the installation and sampling of nine monitoring wells as well as replication..."*
3. **Section 2.1, Overview, Page 2-1, Paragraph 2, Sentence 6:** This sentence currently reads...*"All well samples will be analyzed for target analyte list (TAL) metals."* This statement is incorrect. Only select wells will be analyzed for TAL metals. Please change appropriately.
4. **Section 2.3, Well Installation, Page 2-2, Paragraph 1, Sentence 1:** Please place a comma between the words "investigation" and "data" in this sentence.
5. **Section 2.3, Well Installation, Page 2-2, Paragraph 2:** Please clarify the use of the 8-inch PVC casing during the installation of the nine proposed monitoring wells in this paragraph. Should the use of the 8-inch PVC casing even be mentioned here? The

reason for the use of this casing is talked about in paragraph 5 (paragraph 2 on page 2-3) of this section.

6. **Section 2.3, Well Installation, Page 2-3, Paragraph 1, Sentences 3 and 4:** These sentences read... "The sand pack will be set from the bottom of the hole to approximately two feet above the top of the well screen. A minimum two-foot thick 30/65 fine sand seal will be installed above the sand pack." Please remember to not allow the overall "sand pack" to become too thick/large during the installation of these monitoring wells.
7. **Section 2.4, Groundwater Sampling, Page 2-4, Paragraph 1:** Of the approximately 90 monitoring wells being sampled, what portion of the water column will the groundwater sample be collected from (1st foot of the water column, middle of the screen, 6 inches off the bottom of the screen) and why? Most of the wells can be sampled with the pump one foot into the water column (Page 8 of the DEP SOP for Groundwater Sampling). However, what about the wells known or suspected to be within the chlorinated solvent plume? Maybe all, or a certain number, of these monitor wells should have samples collected from within the well screen. Please discuss.
8. **Section 2.4, Groundwater Sampling, Page 2-4, Paragraph 3, Sentence 3:** Why are we analyzing for PCE? Did the degreasing product used on the airplanes and other equipment at the North Field Maintenance Hangar contain PCE? The Agency for Toxic Substances and Disease Registry (ASTDR) states that TCE is "used mainly as a solvent to remove grease from metal parts, but it is also an ingredient in adhesives, paint removers, typewriter correction fluids, and spot removers." While it says PCE is "widely used for dry cleaning of fabrics and for metal degreasing. It is also used to make other chemicals and is used in some consumer products." Also, please keep in mind the other breakdown products of TCE when reviewing the analytical results: trans-1, 2-dichloroethene and 1, 1-dichloroethene (already "interested" in cisDCE and vinyl chloride). It is my professional opinion that if these compounds are to be found in groundwater samples they will be found in samples collected closest to a/the source area(s) (see analytical results for MW WHF-32-MW-3S). So, they may be a good indicator of a nearby source.
9. **Section 2.4, Groundwater Sampling, Page 2-4, Paragraph 4:** Please clarify that the compound list for the volatile organic carbons (VOCs) that we are interested in at this site (BTEX and PCE, TCE, DCEs, and vinyl chloride to name a few) are included in the USEPA Method chosen for the VOCs, Method SW-846 8260B.
10. **Section 2.4, Groundwater Sampling, Page 2-5, Paragraph 1:** Do we really want to be sampling for nitrate and nitrite? Aren't these monitoring natural attenuation parameters? Haven't we already looked at this information and made judgments concerning the geochemistry of the aquifer?
11. **Extra work outside the scope of this WP:** While Tetra Tech is in the field performing these tasks related to the WP, I would like for them to perform additional duties near/in the wash area at the North Field Maintenance Hangar. This area needs closer scrutiny in order to determine if it is a/the source of the chlorinated solvent plume. Please have Tetra Tech and the Navy (Mr. Ron Joyner) research the history of this wash area. Is this the area where the planes were historically cleaned? Are they currently cleaned here? With what substances were/are they cleaned with? Is there a holding tank for the washing fluids located below the concrete in this area? Is it a tank or an open hole? How large is this tank/hole? Can Tetra Tech and its subcontractor perform a limited MIP investigation in this area? Can we install and sample a monitoring well in this area? The equipment has been reserved and will be in the field in the near future performing

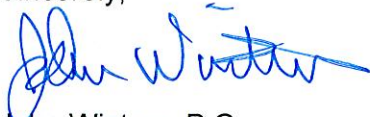
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Naval Air Station Whiting Field, Site 40
April 29, 2008

similar tasks so now is the time to perform this additional assessment. Thank you for your attention to this matter.

Thank you for the opportunity to review this document. If you require additional clarification or other assistance please feel free to contact me at 850/245-8999.

Sincerely,



John Winters, P.G.
Remedial Project Manager

JJC  for ESN 